

Making Money?

Mary is going to invest some money. She sees two advertisements:

Simply Savings Bank

Simple interest rate: 10% per year.

Compound Capital Bank

Compound interest rate: 8% per year.

1. Mary invests \$200 in each bank.

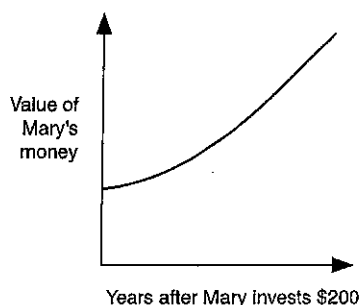
Use a calculator to figure how much she will have in each bank at the end of each year.

Show all your work.

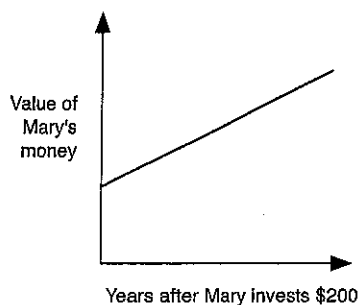
Years	Value at Simply Savings in dollars	Value at Compound Capital in dollars
0	200.00	200.00
1	220.00	
2		
3		
4		
5		

2. Which of the graphs below best shows how Mary's money will grow in each bank?

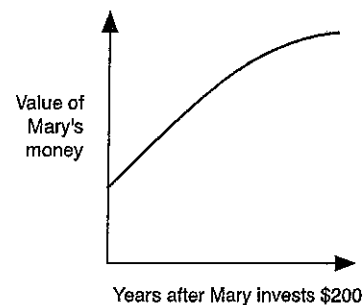
Graph A



Graph B



Graph C



(a) The growth of her money at Simply Savings is best shown by graph

(b) The growth of her money at Compound Capital is best shown by graph

(c) If you think that none of these graphs are a good description, explain why below:

.....

.....

.....

3. Write down a formula for calculating the amount of money in each of these banks after n years.

4. Mary wants to invest some money for 5 years or more.
Which bank should she choose?
Give full reasons for your answer.

Card Set: Investment Plans and Formulas

P1 Investment: \$400 Simple Interest Rate: 16%	P2 Investment: \$400 Compound Interest Rate: 2%
P3 Investment: \$400 Simple Interest Rate: 8%	P4 Investment: \$200 Compound Interest Rate: 2%
P5 Investment: \$400 Compound Interest Rate: 8%	P6 Investment: \$400 Simple Interest Rate: 2%
F1 $A = 400 \times 1.08^n$	F2 $A = 400 + 32n$
F3 $A = 400 \times 1.02^n$	F4 $A = 400 + 8n$
F5 $A = 200 \times 1.02^n$	F6 $A = 400 + 64n$

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Card Set: Tables

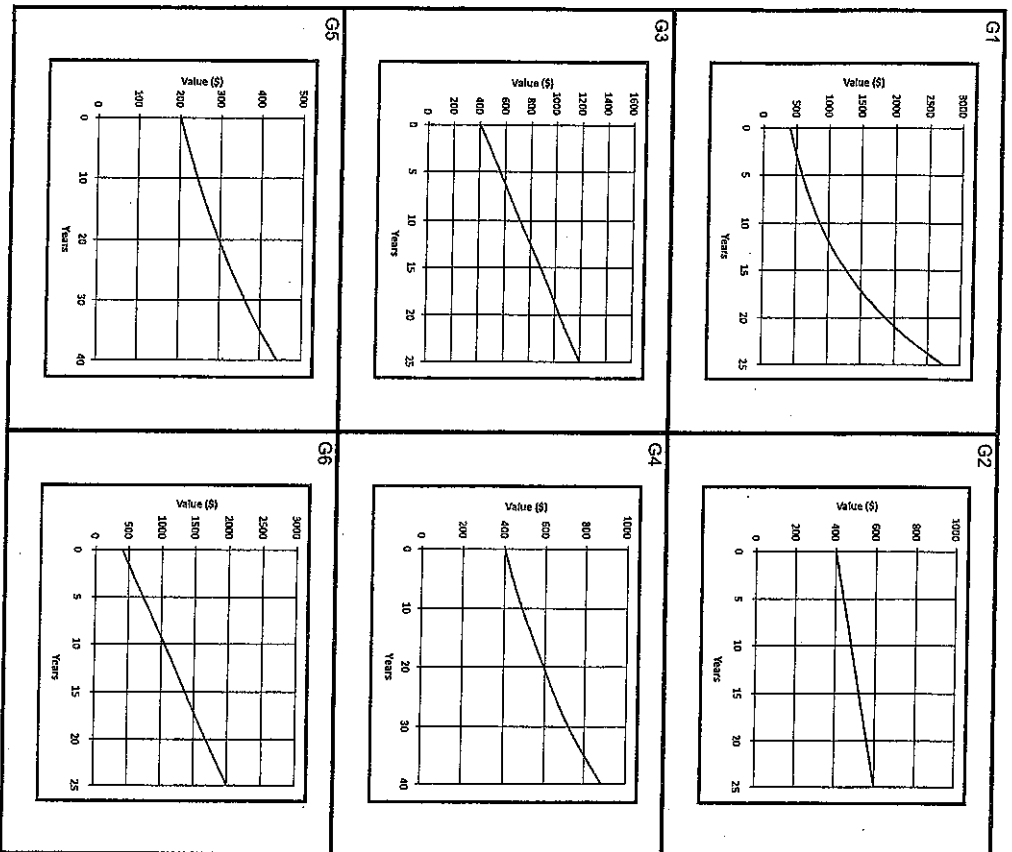
T1 <table> <tr><th>Years</th><th>Value (\$)</th></tr> <tr><td>0</td><td>400.00</td></tr> <tr><td>1</td><td>432.00</td></tr> <tr><td>2</td><td>466.56</td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td>544.20</td></tr> <tr><td>5</td><td>587.73</td></tr> </table>	Years	Value (\$)	0	400.00	1	432.00	2	466.56	3		4	544.20	5	587.73	T2 <table> <tr><th>Years</th><th>Value (\$)</th></tr> <tr><td>0</td><td>200.00</td></tr> <tr><td>1</td><td>204.00</td></tr> <tr><td>2</td><td></td></tr> <tr><td>3</td><td>212.24</td></tr> <tr><td>4</td><td>216.49</td></tr> <tr><td>5</td><td>220.82</td></tr> </table>	Years	Value (\$)	0	200.00	1	204.00	2		3	212.24	4	216.49	5	220.82
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Card Set: Graphs



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Card Set: Statements

<p>S1</p> <p>These two investments will take the same time to double your money.</p>	<p>S2</p> <p>This investment will double your money in 12 years 6 months.</p>
<p>S3</p> <p>This investment gives the worst return for your money over two years or more.</p>	<p>S4</p> <p>This investment is the best one over 10 years.</p>
<p>S5</p> <p>This investment is the best one over 20 years.</p>	

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